

E-filed on: 7/14/06

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

HYNIX SEMICONDUCTOR INC., HYNIX
SEMICONDUCTOR AMERICA INC.,
HYNIX SEMICONDUCTOR U.K. LTD., and
HYNIX SEMICONDUCTOR
DEUTSCHLAND GmbH,

Plaintiffs,

v.

RAMBUS INC.,

Defendant.

No. CV-00-20905 RMW

ORDER GRANTING HYNIX'S MOTION
FOR A NEW TRIAL ON THE ISSUE OF
DAMAGES UNLESS RAMBUS ELECTS
REMITTITUR OF THE JURY AWARD TO
\$133,584,129

[Re Docket Nos. 2064, 2065]

The jury awarded Rambus Inc. ("Rambus") damages in the amount of \$306,967,272 in the patent phase of this trial. Hynix Semiconductor Inc., Hynix Semiconductor America Inc., Hynix Semiconductor U.K. Ltd., and Hynix Semiconductor Deutschland GmbH (collectively, "Hynix") move for a new trial on the issue of damages or, in the alternative, for remittitur. Rambus opposes the motion. The court has reviewed the papers and considered the arguments of counsel. For the reasons set forth below, plaintiffs' motion for a new trial on the issue of damages is GRANTED unless Rambus files notice with the court within thirty (30) days of this order accepting remittitur of

the jury award to \$133,584,129 for damages through December 31, 2005.¹

I. ANALYSIS

A. A Reasonable Royalty

"[U]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer." 35 U.S.C. § 284. Section 284 establishes a floor below which damage awards may not fall. *See Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1326 (Fed. Cir. 1987). The "reasonable royalty" analysis may be measured by "[w]hat a willing licensor and a willing licensee would have agreed upon in a suppositious negotiation for a reasonable royalty." *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1121 (S.D.N.Y. 1970); *see also Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1078 (Fed. Cir. 1983) (describing the hypothetical negotiation as one "resulting from arm's length negotiations between a willing licensor and a willing licensee").

The burden of proving damages rested with Rambus.² Its expert, Professor David J. Teece, testified that appropriate royalty rates were 0.75% for Hynix's SDRAM device and 3.50% for the DDR SDRAM ("DDR") device. The parties agree that the evidence supports these royalty rates. Rambus, however, claims that the higher rates, as necessarily applied by the jury, are supported by the evidence. Teece testifies that his rates were conservative because: (1) rates in comparable licensing agreements reflected an uncertainty discount; (2) a hypothetical negotiation required consideration of only United States sales as opposed to comparable licensing agreements which were based upon worldwide sales; (3) comparable licensing agreements included up-front fees in addition to the running royalty rates; and (4) a published survey indicated higher royalty rates are

¹ In light of the court's conclusion that the damages found by the jury are not supported by the weight of the evidence, the court will not separately discuss Hynix's assignments of evidentiary error. However, the court does not find them meritorious.

² Prior to trial, the parties stipulated that SDRAM and DDR sales through December 31, 2005 were \$1,702,544,332 and \$2,742,557,314, respectively, representing the royalty base for the damages period through December 31, 2005. Thus, the issue on damages was essentially limited to a determination of the appropriate royalty rates for the two types of devices.

1 commanded by revolutionary technologies.

2 The explanations provided by Teece do support a conclusion that his suggested royalty rates
3 were conservative, but he provided no meaningful guidelines to quantify any adjustment to his
4 suggested rates. In fact, one could reasonably infer that if he could have quantified an adjustment
5 without merely speculating, he would have done so.

6 **B. Adjustments to Reasonable Royalty Rates**

7 The question, then, is whether there is sufficient evidence regarding these factors to provide
8 the jury with a basis to make a reasonable upward adjustment to Teece's royalty rates, as opposed to
9 leaving the jury to make such an estimate by mere speculation and conjecture. "[A] trier of fact
10 must have some factual basis for a determination of a reasonable royalty." *Unisplay S.A. v. Am.*
11 *Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir. 1995). Testimony by an expert must be "more than
12 belief or unsupported speculation." *Daubert v. Merrill Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993).
13 A jury's award of infringement damages cannot be upheld if the amount is "clearly not supported by
14 the evidence, or based only on speculation or guesswork." *Union Carbide Chems. & Plastics Tech.*
15 *Corp. v. Shell Oil Co.*, 425 F.3d 1366, 1373 (Fed. Cir. 2005) (internal quotation and citations
16 omitted).

17 **1. Uncertainty Discount**

18 Teece testified that his proposed rates were conservative because they did not account for an
19 "uncertainty discount" that a negotiating patentee and licensee take into account because of
20 uncertainty as to whether the patents are actually valid and infringed at the time of negotiations.
21 Here, in contrast, the patents were assumed valid and infringed for purposes of the damages
22 calculation. Teece testified upon cross-examination that certain published statistics have shown that
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53.4% of litigated patents are found valid.³ On redirect Teece quantified the effect of uncertainty using an analogy:

Q: [Mr. Stone] Now, as an economist, if I have the opportunity to win a bet for \$2, and if my chances of [winning] a \$2 bet are 50 percent, what would I be willing to pay?

A: [Professor Teece] Well, it depends on your risk proclivities, but you might be willing to pay a buck.

Q: [Mr. Stone] Okay. So if the chances, if in 2000 the various companies who were negotiating with Rambus thought that there was a 50-50 chance and it was the 50-50 chance that led them to agree to pay 0.75 and 3.5, if we now assume, that's at the 50 percent rate – if we now assume the patents are valid and infringed so it's 100 percent, or a sure thing, what would these computations lead to as the royalty rates that would be agreed?

A: [Professor Teece] If you knew that the patent was valid and infringed and you were willing to pay a buck before, you'll pay two bucks now, so the rates would be twice [what] they would otherwise be.

Tr. Trans. 1167:5-25. Therefore, Teece implied that elimination of uncertainty could have the effect of doubling the royalty rates. Teece also testified that the license agreement negotiated between Rambus and Hitachi, another DRAM manufacturer, provided for a 1% royalty rate for the SDRAM and a 4.25% royalty rate for the DDR. Teece explained that while the agreement with the other DRAM manufacturers were negotiated outside of litigation, the agreement with Hitachi was negotiated after litigation for patent infringement had already commenced. Tr. Trans. 971:2-981:11; 1058:7-12; Tr. Ex. 5661. Therefore, that fact suggests that the removal of some of the uncertainty about infringement or invalidity of the Rambus patents may justify a similar higher rate.

2. U.S.-Only Sales Base

Teece further testified that his suggested royalty rates were based on a comparison with license agreements that covered worldwide sales whereas the hypothetical negotiations contemplated a U.S.-only sales base. Teece explained that a negotiating patentee would generally agree to a lower royalty rate for a worldwide license because the patentee would not have to separately obtain and enforce licenses outside the U.S., where patent rights may not be as protected

³ However, Teece did not offer an opinion about these surveys because, pursuant to the court's motion *in limine* ruling, the underlying surveys were statistically insignificant and did not provide a valid legal basis to support an expert opinion quantifying the uncertainty discount. Mar. 1, 2006 Order on Mots. *In Limine* at 13-14.

1 or protectable as in the U.S. Therefore, narrowing the royalty base to only the U.S. would lead to a
2 higher royalty rate. In particular, Teece stated that the running royalty might be one, two, or three
3 (but not four) times higher, and that "there would be a premium, for sure." Tr. Trans. 1127:8-10.
4 This testimony as to the possible effect of basing royalty rates on United States' sales only was pure
5 speculation. No quantitative evidence was introduced.

6 **3. Up-Front Fees**

7 Teece also noted that the comparable license agreements with seven other DRAM
8 manufacturers each included an up-front fee in addition to the running royalty rate. However, his
9 opinion as to the appropriate Hynix/Rambus royalty rates did not take into account the payment of
10 any up-front fees. At trial, Rambus introduced an exhibit which indicated the up-front fee amount
11 for each of the seven comparable license agreements upon which Teece based his reasonable royalty
12 rates. See Tr. Ex. 5661. However, Teece testified that although "it's not uncommon, in a patent
13 licensing arrangement, to have, in addition to a running royalty, an up-front fee," he concluded that
14 there would not be an up-front fee in the instant hypothetical negotiation. Tr. Trans. 1057:24-
15 1058:2; 1060:19-1061:10. As Teece explained on direct examination, he excluded an up-front
16 payment in his opinion on the appropriate royalty rates because "it's not entirely clear to me why
17 these payments were made. In some cases it was for past infringement, in some cases it was not."
18 Tr. Trans. 1061:3-10. There was no other evidence from which the jury could have reasonably
19 inferred that a Hynix/Rambus license would have included an up-front payment.

20 **4. Revolutionary Technologies**

21 Teece also testified that a survey published in 1997 in *Les Nouvelles* supports royalties in the
22 range of 5% to 10% for "revolutionary technologies." At the same time he noted that the 5% to 10%
23 range of royalty rates is an average across different industries and includes those for pharmaceutical
24 licenses, which tend to command higher rates, and licenses for medical equipment and software,
25 which tend to command very high rates. Tr. Trans. 1072:11-20; 1145:4-19. Teece declined to opine
26 that the claims-in-suit represented revolutionary technologies. Teece also noted that another survey,
27 which he considered along with the *Les Nouvelles* survey, stated a median royalty rate of 3.2% for
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1 the electronics industry. Tr. Trans. 1073:22-1075:4. No evidence was introduced that provided
2 guidelines or a basis to adjust for the nature of the Rambus inventions. Therefore, the inclusion of
3 any amount in the royalty rate because the Rambus patents involved "revolutionary technology"
4 would be the result of speculation. Further, although there may have been revolutionary aspect to
5 some of Rambus' patents (e.g., the use of a narrow multiplexed bus), no evidence established a basis
6 for including any particular amount because of the alleged revolutionary technology or that the
7 particular patent-in-suit involved revolutionary technology, no evidence established a basis for
8 including any particular amount.

9 **C. Remittitur**

10 "[T]he use of remittitur enables parties to avoid the delay and expense of a new trial when a
11 jury's verdict is excessive in relation to the evidence of record." *Unisplay*, 69 F.3d at 519 (citing
12 Charles A. Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice & Procedure: Civil 2d* §
13 2815 (2d ed. 1995)). In the Federal Circuit, the "maximum recovery rule" applies in calculating
14 excessive damages to remit. *Id.* This rule "requires that the determination be based on the highest
15 amount of damages that the jury could properly have awarded based on the relevant evidence." *Id.*
16 Applying the maximum recovery rule here, the evidentiary record as a whole could support only one
17 basis for quantifying an upward adjustment to Teece's proposed royalty rates. As was presented to
18 the jury, the rates in the Hitachi license agreement were 1% for SDRAM and 4.25% for DDR.
19 Teece explained to the jury that the rates for Hitachi may have been higher because the negotiations
20 were made after patent infringement litigation between the parties had commenced. In comparison,
21 the other DRAM manufacturers negotiated the lower rates of 0.75% for SDRAM and 3.50% for
22 DDR outside of litigation. Teece also explained that a negotiating patentee and licensee generally
23 agree to a lower royalty rate if there is uncertainty as to whether the patents are actually valid and
24 infringed. The jury could have reasonably concluded that because the patents are assumed valid and
25 infringed, Teece's proposed reasonable royalty rates might be adjusted upward to the rates in the
26 Hitachi agreement to reflect the effect of uncertainty about the patents-in-suit.


27 Although the evidence supports that Teece's proposed rates are conservative, the evidence as
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1 to how conservative is insufficient to justify any particular amount in excess of the royalty rates in
 2 the Hitachi license agreement. Teece did not adjust for the factors that he described as making his
 3 opinion conservative. Presumably, he did not adjust for them because, at least in part, he believed
 4 that the amount of any adjustment would be speculative and subject to conjecture. The record
 5 supports a maximum recovery of \$133,584,129, which is the royalty amount calculated using the
 6 Hitachi royalty rates.⁴ The jury awarded damages totaling \$306,967,272. Accordingly, the court
 7 finds remittitur of \$173,383,143 of the jury award is warranted.

8 **IT IS HEREBY ORDERED THAT,**

9 Hynix's motion for a new trial on the issue of damages is GRANTED unless Rambus files
 10 notice with the court within thirty (30) days of this order accepting remittitur of the jury award to
 11 \$133,584,129 for damages through December 31, 2005.

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 13 DATED: 7/14/2006


 14 RONALD M. WHYTE
 15 United States District Judge
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 27 ⁴ This total is obtained by applying 1% to the stipulated SDRAM sales (through December
 28 31, 2005) of \$1,702,544,332 and 4.25% to the stipulated DDR sales (through December 31, 2005) of
 \$2,742,557,314.

THIS SHALL CERTIFY THAT A COPY OF THIS ORDER WAS PROVIDED TO:

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